

Evaluation # 200240-I

Safety & Buildings Division 201 West Washington Avenue P.O. Box 2658 Madison, WI 53701-2658

Wisconsin Building Products Evaluation

Material

Foam-In-Place Insulation

Manufacturer

THE FOM Company™, Ltd. 5102 W. Village Green Dr., Ste. 106 Midlothian, VA 23112

SCOPE OF EVALUATION

GENERAL: This report evaluates the use of cellular plastic (aminoplast) insulation, manufactured by THE FŌM Company™, LTD., was evaluated as a foamed-in-place insulation for brick and block cavities, concrete block cavities, pre-cast hollow core block and plank, and new frame construction. The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the fire safety requirements for foam plastic, for the codes listed below.

This review includes the cited **Comm** code requirements below in accordance with the current **Wisconsin Uniform Dwelling Code (UDC)**, (for 1- & 2-family dwellings):

- <u>Foam Plastic</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the fire safety requirements of **s. Comm 21.11**.
- Thermal Performance: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the thermal performance requirements of Subchapter VI, ss. Comm 22.20, 22.21, 22.23, 22.25, 22.27, 22.28, and 22.31. Note see <u>LIMITATIONS OF APPROVAL</u> section.

This review includes the cited Comm code requirements below in accordance with the current Wisconsin Building and Heating, Ventilating and Air conditioning Code (expires 6/30/02):

- <u>Foam Plastic</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the fire safety requirements of ss. Comm 51.06(2), and 51.06(4)(a).
- <u>Thermal Performance</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the thermal performance requirements of ss. Comm 63.17(1), (2)(a)1. Note see LIMITATIONS OF APPROVAL section.

This review includes the cited **International Building Code** (**IBC**) requirements below in accordance with the **Wisconsin Amended IBC Code** (**effective 7/01/02**):

- <u>Foam Plastic</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the fire safety requirements of ss. IBC 2603.2, and 2603.3.
- <u>Thermal Performance</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation was evaluated in accordance with the thermal performance requirements of s. Comm 63.1018(2)(a)1., (c). Note see LIMITATIONS OF APPROVAL section.

DESCRIPTION AND USE

General: The FŌM, is a cellular plastic (aminoplast) insulation having an R-value of 5.18 per inch.

Composition & Materials: The FŌM is composed of a urea-formaldehyde resin that is mixed with a catalyst. These two water-based solutions are frothed at the application site to produce the finished cellular insulation material. The cold setting mixing process forms a low-density, insulation material. The FŌM flows into the cavities. Setting takes place in 10-60 seconds after leaving the application gun. The material can be troweled before setting and it can be pumped to fill empty cavities. The cellular structure is 40% open and 60% per cent closed. There is no expansion after leaving the gun.

TESTS AND RESULTS

The tests and results listed below cover both the current WI Building Code **Comm** and **IBC** requirements.

A report in accordance with ASTM E84 was submitted for smoke development and flame index, and is on file with the department.

A report in accordance with ASTM C177 was submitted to verify the R-value of the foam. The R-value of the foam is 5.1 per inch. The report is on file with the department.

LIMITATIONS OF APPROVAL

The Comm limitations requirements below are in accordance with the current Wisconsin Uniform Dwelling Code (UDC), (for 1- & 2-family dwellings):

• <u>Thermal Performance</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation shall meet the thermal performance requirements of **Subchapter VI**, ss. Comm 22.20, 22.21, 22.23,

22.25, 22.27, 22.28, and 22.31. Calculations shall be signed, sealed and submitted in accordance with s. Comm 22.31.

Building Code Applicable to Projects Submitted for Review Prior to July 1, 2002: The **Comm** limitations below are in accordance with the current **Wisconsin Building and Heating, Ventilating and Air Conditioning Code:**

• <u>Thermal Performance</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation shall meet the thermal performance requirements of ss. Comm 63.17(1), (2)(a)1. Calculations shall be signed, sealed and submitted in accordance with s. Comm 63.18.

The **IBC** limitations below are in accordance with the **Wisconsin Amended IBC 2000 Code** (effective 7/01/02):

• <u>Thermal Performance</u>: The FŌM foamed-in-place cellular plastic (aminoplast) insulation shall meet the thermal performance requirements of s. Comm 63.1018(2)(a)1. and (c). Calculations shall be signed, sealed and submitted in accordance with s. Comm 63.1019.

This approval will be valid through December 31, 2007, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date: Approval Date: August 15, 2002 By:		
	Lee E. Finley, Jr.	
	Product & Material Review	
	Integrated Services Bureau	

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